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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/015,559	12/17/2001	Klaus Kramer	52049	6211
26474	7590	09/26/2006	EXAMINER	
NOVAK DRUCE DELUCA & QUIGG, LLP			WANG, SHENGJUN	
1300 EYE STREET NW				
SUITE 400 EAST TOWER			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005			1617	

DATE MAILED: 09/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/015,559	KRAMER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Shengjun Wang	1617	

- The MAILING DATE of this communication appears on the cover sheet with the correspondence address -  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

1) Responsive to communication(s) filed on 03 July 2006.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

4) Claim(s) 3-9, 11 and 12 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 3-9, 11 and 12 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

## DETAILED ACTION

Receipt of applicant's remarks submitted July 3, 2006 is acknowledged.

### *Claim Rejections 35 U.S.C. 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. Claims 3-9 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Deckner et al. (EP 0 238 302, IDS), in view of Wechter et al. (US 6,048,891, 6,555,575).
3. Deckner et al. teaches a cosmetic, or topical composition comprising 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-carboxylic acid in the amount of 0.01 to 50% as a free radical inhibitor and other well-known ingredients for topical compositions, such as humectant, emulsifier, and method of using the same for inhibiting generation of free radical in the skin. See, particularly, pages 2-4, and the claims.
4. Deckner et al. do not teach expressly the employment of 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ethylenecarboxylic acid.
5. However, Wechter et al. teaches that carboxylic derivatives of tocopherols are similarly useful as therapeutical agents, particularly, as antioxidants, or free radical inhibitors. See, particularly, columns 6-11, 35-37 in '891. The length of the linker between the carboxyl moiety and chroman may be varied from a bond to five methylenes. See formula I in column 6, wherein m is defined as 0-5. Wechter et al. expressly teaches that 6-hydroxy-2,5,7,8-tetramethyl-

chroman-2-ethylenecarboxylic acid is useful as antioxidant agent. See, particularly, the claims in '575.

6. Therefore, it would have been *prima facie* obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to use 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ethylenecarboxylic acid in Deckner's cosmetic composition and use the same for protecting skin.

7. A person of ordinary skill in the art would have been motivated to use 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ethylenecarboxylic acid in Deckner's cosmetic composition and use the same for protecting skin because carboxylic derivatives of tocopherols in general, and 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ethylenecarboxylic acid in particular, are known to be similarly useful as antioxidants, or free radical inhibitors.

*Response to the Arguments*

Applicants' remarks submitted July 3, 2006 have been fully considered, but are not persuasive as to the rejections set forth above.

The examiner thanks applicants for pointing out the actual structure of LLU- $\alpha$ . However, as discussed in the prior office action, Wechter particularly prefers 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ethylenecarboxylic acid as the antioxidant and nitrogen oxide scavengers. See the claims in '575. In description of the antioxidant of formula I in column 6, Wechtr clearly state in a preferred embodiment, R is O, n=1, m=2, R6 is COOH. See, col. 6, lines 45-47. In view of those teachings, one of ordinary skill in the art would have expected that 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-ethylenecarboxylic acid would have better antioxidant property than 6-hydroxy-2,5,7,8-tetramethyl-chroman-2-carboxylic acid. Therefore, the results

presented in the 132 declaration fails to establish an unexpected result for rebutting the prima facie case of obviousness.

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shengjun Wang whose telephone number is (571) 272-0632. The examiner can normally be reached on Monday to Friday from 7:00 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SHENGJUN WANG  
PRIMARY EXAMINER  
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Art Unit 1617